

REMARKS/ARGUMENTS

The above-identified patent application has been reviewed in light of the Examiner's Action dated April 8, 2004. Claims 1, 14 and 20 have been amended, without intending to abandon or to dedicate to the public any patentable subject matter. Claims 27-38 have been withdrawn. Claims 39 and 40 are new. Accordingly, Claims 1-26 and 39-40 are now pending. As set out more fully below, reconsideration and withdrawal of the rejections of the claims are respectfully requested.

The present invention is generally directed to remotely diagnosing computer hardware and software. As generally recited by the claims, a communications interface, for example a browser application, and a client application are both running on a client computer. In addition, the communications interface is in communication with a server over a first communication channel, while the client application is in communication with the server over a second communication channel. Accordingly, rather than routing all messages and information passed between the client computer and the server through a browser application, the present invention allows messages and data to be passed between the client application and the server, in addition to allowing messages and data to be passed between the communication interface and the server. This arrangement allows a client application, such as a diagnostic application, to run on the client computer separately from of the communications interface. As will be described in greater detail below, the references cited in the Office Action do not discuss such an arrangement. Instead, the cited references include discussion of a diagnostic application running on a client that is capable of accessing information stored on a server through a browser, but that is not capable of independently exchanging information with a server.

Claims 1, 3-23, 25 and 26 stand rejected under 35 U.S.C. §102 as being anticipated by U.S. Patent No. 6,539,499 B1 to Stedman et al. ("Stedman"). In order for rejection under 35 U.S.C. §102 to be proper, each and every element as set forth in a claim must be found, either expressly or inherently described, in a single prior art reference. (MPEP §2131). However, each and every element of the claims cannot be found in the Stedman reference. In particular, Stedman does not describe the use of multiple communication channels as claimed in the present

application. Accordingly, reconsideration and withdrawal of the rejections of Claims 1, 3-23, 25 and 26 are respectfully requested.

The Stedman reference is generally directed to a graphical interface, method, and system for the provision of diagnostic and support services in a computer system. In particular, Stedman discusses a diagnostic application stored locally on a computer system, or that is accessible to the computer system through a network connection. (Stedman col. 2, lines 62-66). After setting the diagnostic application to run, the user selects a component of the computer system for diagnosis. (Stedman col. 3, lines 55-61). The diagnostic application then performs a driver identification test which includes determining whether the software driver is the most current for the computer system. (Stedman col. 4, lines 3-15). In order to determine whether the installed driver is the most current, the diagnostic application accesses the Internet via the computer user's web browser. (Stedman col. 4, lines 15-18). Following the check of the software driver, the diagnostic application of Stedman runs a component specific diagnostic tool on the selected component. (Stedman col. 4, lines 28-31). The component specific diagnostic tool may be stored remotely on a network, in which case the diagnostic application retrieves the diagnostic tool by accessing the Internet through the user's web browser and Internet service provider. (Stedman col. 4, lines 37-42). If attempts at local repair of the identified problem are not successful, an online diagnostic website may be accessed through the user's browser and Internet service provider. (Stedman col. 5, lines 41-45). For example, the user may access a diagnostic website maintained by the computer manufacturer, and search for archived pages that most closely match the question or key words used to describe the problem. (Stedman col. 5, lines 45-59). The user may also initiate an assisted service option by entering a query or other information to be submitted to an assisted service specialist. (Stedman col. 5, lines 60-66). The diagnostic application then packages the query, prompts the user to initiate the system's Internet connection, and the query is transmitted in the same manner as an electronic mail transmission. (Stedman col. 6, lines 4-9). The assisted service specialist receiving the query may provide written advice, run a remote diagnostic application, or download a diagnostic tool. (Stedman col. 6, ll. 22-65.)

Claim 1 generally recites a method for remotely diagnosing a computer. Claim 1 includes "establishing a first communication channel between a server and a communications interface associated with a client computer." In addition, Claim 1 recites "establishing a second communication channel between a client application operating on said client computer and said server." Furthermore, Claim 1 recites that "said first communication channel is logically separate from said second communication channel." Claim 1 additionally recites downloading a first diagnostic tool from the server to the client application in response to a signal associated with the communications interface received by the server, executing the first diagnostic tool using the client application, returning a result from the client application to the server, and returning a disposition from the server to the communications interface.

The Stedman reference does not disclose establishing a first communication channel between a server and a communications interface associated with a client computer, establishing a second communication channel between a client application operating on the client computer and the server, and in response to a signal associated with the communications interface and received by the server, downloading a first diagnostic tool from the server to the client application, as generally recited by Claim 1. Instead, the Stedman reference discusses using a browser for communications with a server, and makes no disclosure of communications between a client application and a server over a communication channel separate from the one established between the browser and the server. The Stedman reference also not disclose executing a diagnostic tool that has been downloaded from the server to a client application using that client application. Instead, Stedman discusses the use of a diagnostic application that is already installed on a user's computer, or downloading a diagnostic application from a server. Accordingly, the Stedman reference does not disclose each and every element recited by Claim 1, and the rejection of Claim 1 and the claims dependent therefrom as anticipated by Stedman should be reconsidered and withdrawn.

Claims 3-13 which depend from Claim 1, recite additional patentable subject matter. For instance, Claim 3 recites establishing a user record that includes a status field, and in response to a signal received from the communications interface, setting the status field to a first value. Claim 3 further recites "executing a second diagnostic tool using said client application in

response to said client application detecting said first value in said user record." Applicant notes that the portions of Stedman cited to in the Office Action with respect to Claim 3 relate to determining whether a driver installed on a client computer system is the most current available. Accordingly, Stedman's discussion of accessing a database is related to identifying the most recent software driver for a component. However, Stedman does not discuss a user record that corresponds to the client computer. Accordingly, for at least this additional reason, Claim 3 and the claims dependent therefrom (*i.e.*, Claims 4-6) are not anticipated by Stedman, and the rejections of these claims should be reconsidered and withdrawn.

Claim 4 recites setting the status field in a user record in a database to a second value after executing the second diagnostic tool, and displaying a next page in response to the communications interface detecting the second value in the user record. Applicants note that the Stedman reference does not discuss setting a status field to a second value after executing a second diagnostic tool in response to a signal received from a client application. Specifically, the portions of the Stedman reference cited in the Office Action with respect to Claim 4 do not describe setting a status field in a user record, and therefore do not describe setting the status field to a second value as recited by Claim 4. Accordingly, for at least this additional reason, Claim 4 and Claim 6, which depends from Claim 4, are not anticipated by Stedman, and the rejections of these claims should be reconsidered and withdrawn.

Claim 5 depends from Claim 3, and requires that the client application poll the server to detect the first value in the status field of the user record. There is no disclosure in Stedman of polling the server. For example, the portion of Stedman cited in the Office Action in connection with Claim 5 is related to accessing through the user's browser archived information related to the operation of the component being checked. Using a browser to access online diagnostic options is not the same as using a client application to poll a server to detect a particular value. Accordingly, for at least these additional reasons, Claim 5 is not anticipated by the Stedman reference, and the rejection of Claim 5 should be reconsidered and withdrawn.

Claim 6 depends from Claim 4, and recites that the communications interface polls the server to detect the second value. The portion of Stedman cited in the Office Action for disclosing the elements recited by Claim 6 encompass the portion recited in connection with the

rejection of Claim 5. Applicant notes that Claim 5 is directed to the client application polling the server to detect the first value, while Claim 4 is directed to the communications interface polling the server to detect the second value. In the cited portion of Stedman, the only application software that is described as contacting the server is a browser. However, the claimed client application and communications interface are distinct from one another. Furthermore, the cited portion of Stedman does not described polling. Therefore, for at least these additional reasons, the rejection of Claim 6 should be reconsidered and withdrawn.

Claim 7 depends from Claim 1 and additionally recites downloading and executing a second diagnostic tool using the client application in response to user input entered using the communications interface. Furthermore, Claim 7 recites returning a result of executing the second diagnostic tool to the server, and displaying a disposition to the user using the communications interface. The Office Action cites to description related to using a browser application to access a diagnostic website to search for updates on the operation of a selected component, or alternatively running a diagnostic application locally. However, Stedman does not describe executing a diagnostic tool using the client application, returning a result of executing the diagnostic tool to the server, and displaying a disposition to the user using a communications interface. Accordingly, for at least these additional reasons, the rejections of Claim 7 and the claims dependent therefrom (*i.e.*, Claims 8 and 9) should be reconsidered and withdrawn.

As further examples of additional patentable subject matter, Claim 8 recites comparing the result of executing the third diagnostic tool to a plurality of stored results related to dispositions wherein the server returns at least a first disposition to the communications interface. Claim 9 recites that the third diagnostic tool traps an error message generated on the client computer wherein the step of returning a result to the server comprises returning the tractor message. Claim 10 recites downloading a second client diagnostic tool from the server to the client application in response to a signal from communications interface received by the server. Claim 11 recites that the disposition can comprise various enumerated information. Claim 12 recites providing at least a partial inventory of devices and prompting the user to identify one or

more of the devices. Claim 13 recites storing at least a partial inventory of devices in a database. In view of these additional patentable elements, Claims 8-13 should be allowed.

Claim 14 is generally directed to a system for remotely diagnosing computer hardware and software. Claim 14 includes a recitation of "a communications interface in communication with said server over a first logical line of communication." In addition, Claim 14 includes "a client application program, wherein said client application program communicates with said server over a second logical line of communication and said client application performs a number of functions." The functions performed by the client application include "executing at least one of said plurality of client diagnostic tools, said at least one of said client diagnostic tools being downloaded from said server over one of said second logical line of communication and a third logical line of communication."

The claims depending from Claim 14 recite additional patentable subject matter. For example, Claim 15 recites that the computer network over which the first and second logical lines of communication are established comprises the Internet. Claims 16 and 17 recite that a first of the client diagnostic tools creates an inventory of installed hardware and software. Claims 18 and 19 recite particular forms of information that can be included as part of a disposition. In view of these additional patentable elements, Claims 15-19 should be allowed.

Claim 20 is generally directed to a method for providing a user of a computer with a diagnosis of said computer from a remote location. Claim 20 includes "establishing a first communications channel comprising a first logical line of communication between a communications interface associated with said computer and a server located at said remote location." In addition, "in response to said server receiving a first signal from said communications interface, downloading a client application to said computer over a second communication channel comprising a second logical line of communication." Claim 20 additionally recites "executing said first diagnostic tool using said client application, wherein at least a partial invention of at least one of hardware and software associated with said computer is obtained."

Dependent Claims 21-23 and 25-26 recite additional patentable subject matter. For example, Claim 21 recites that the step of analyzing the first result comprises comparing the first

result to a plurality of stored results having an associated disposition. Claims 22 and 23 relate to downloading a third diagnostic tool to the computer and executing the third diagnostic tool using the client application, wherein an application resident in the computer is opened, and wherein information concerning the opening of the resident application is returned to the server. Claims 25 and 26 recite that the step of executing the first diagnostic tools is initiated in response to the client application detecting a first value in a user record stored on the server, wherein the first value is entered in the user record in response to a signal received from the communications interface.

Claims 2 and 24 stand rejected under 35 U.S.C. §103 as being unpatentable over Stedman in view of U.S. Patent No. 6,314,439 to Bates et al. ("Bates"). In order to establish a *prima facie* case of obviousness under §103, there must be some suggestion or motivation to modify the reference or to combine the reference teachings, there must be a reasonable expectation of success, and the prior art reference or references must teach or suggest all of the claim limitations. (MPEP §2143). Because each and every element of the invention as claimed in Claims 2 or 24 cannot be found in the cited references, as set forth more fully below, the rejections under 35 U.S.C. §103 should be reconsidered and withdrawn.

Claim 2 depends from Claim 1 and additionally recites that the communications interface recited by Claim 1 includes a browser. Claim 2 further recites downloading a client account number from the server to the browser, placing the account number in a title bar of a browser window, and passing the account number to the client application, wherein the client application copies the account number from the browser window.

As described elsewhere herein, the Stedman reference does not teach, suggest or disclose each and every element recited by Claim 1. In addition, Stedman does not teach, suggest or disclose downloading a client identifier from the server to the browser or passing the identifier to the client application. In particular, the portion of Stedman cited in the Office Action with respect to this element states that a client computer can access a diagnostic application comprising a diagnostic website. Accordingly, Applicants request that the Examiner identify where in Stedman a disclosure of downloading a client identifier is made. In particular, the reading of Stedman set forth in the Office Action inexplicably equates Stedman's discussion of

an icon in connection with launching a local diagnostic application with the claim's recitation of downloading a client identifier to a browser and passing the identifier from the browser to the client application. There is no teaching, suggestion or disclosure in Stedman of downloading a client identifier or of passing such an identifier to a client application. Accordingly, for at least these reasons, the rejection of Claim 2 as obvious should be reconsidered and withdrawn.

The Office Action states that Stedman does not discuss placing the identifier in a title bar of a browser window, or a client application that copies the identifier from the browser window. The Office Action cites to the Bates reference for such elements. The portion of Bates cited by the Office Action describes conventional web browsers that allow users to generate a list of favorites. (Bates, col. 1, ll. 41-45.) As discussed in Bates, such lists generally consist of a title that points to the universal resource locator that must be entered in order to retrieve a web page. The title may be provided as part of a web page, and entered in the favorites list when a user chooses to add the web page to that list. The title can be the same as the title that is displayed in the title bar of a web browser when the document or page is being viewed. However, Bates does not discuss passing an identifier from the title bar of a browser window to a client application. Instead, Bates is limited to a discussion of saving the title and associated address as part of a favorites list that is part of the browser application. There is no teaching, suggestion or disclosure in Bates of passing an identifier from the title bar of a browser window to a separate client application. Therefore, for at least these additional reasons, the rejection of Claim 2 as obvious should be reconsidered and withdrawn.

Applicants further note that the Office Action provides no suggestion or motivation to combine the Stedman and Bates references. Furthermore, even if the proposed combination were proper, it would not provide each and every element of Claim 2. For instance, to the extent that the references discuss communications with a server, such communications are solely through a web browser. In addition, even if these references did disclose another application in communication with a server, there is no teaching, suggestion or disclosure of passing an identifier from the browser to such other application. Therefore, for at least these additional reasons, the rejection of Claim 2 should be reconsidered and withdrawn.

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Claim 24 depends from Claim 20, and additionally recites assigning an account number to the computer and downloading the account number from the server to the communication interface. In addition, Claim 24 recites placing the account number in a title bar of the window on the computer and copying the account number from the title bar to the client application.

As noted above, neither the Stedman nor the Bates reference teaches, suggests or discloses passing an identifier from the title bar of a browser to a separate client application. Moreover, those references do not teach, suggest or disclose the assignment of an account number to a computer. Furthermore, as also discussed above, the proposed combination is not proper, and even if made would not disclose each and every element of the claim. Therefore, for at least these additional reasons, the rejection of Claim 24 should be reconsidered and withdrawn.

New Claims 39 and 40 present original Claims 2 and 24 in independent form. Accordingly, these claims are allowable for at least the reasons that Claims 2 and 24 are allowable as set forth above.

The application now appearing to be in form for allowance, early notification of same is respectfully requested. The Examiner is invited to contact the undersigned by telephone if doing so would expedite the resolution of this case.

Respectfully submitted,

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